

PLUS 4/9/04

Butler, Douglas

From: PLUS
Sent: Wednesday, April 07, 2004 9:23 AM
To: Butler, Douglas
Subject: PLUS Results for 10729448

Here are the PLUS search results for 10729448.

This search was prepared by the staff of the Scientific and Technical Information Center, SIRA. If you have questions or comments about this search, please reply via email to PLUS@uspto.gov.



10729448_QUAL.txt



10729448_LIST.txt



10729448_WEST.txt



10729448_EAST.txt



10729448.east



10729448_CLS.txt



10729448_CLSTITLES.txt



10729448_WDS.txt

xl

10729448_LIST

PLUS Search Results for S/N 10729448, Searched April 07, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

6158559	6234505	5802759
4785517	6340152	5804220
4966257	6644446	5836193
4948833	4969752	5848568
4588037	4474097	5860515
5735174	4934185	5881599
4413817	5205204	5996862
4569299	5423259	6022158
4785685	5606910	6048037
4993857	5884530	6062588
5295573	6067743	6131325
5361529	6148985	6155730
5396981	4259155	6167802
5658115	4261536	6382400
5886310	4328947	6550865
5946845	4355480	5480231
5974738	4434645	6198202
6077117	4445840	5286950
6186588	4470576	5362943
6269585	4483071	5420392
4405119	4486957	5465601
4540142	4539880	5769579
5992583	4558641	5836442
4166523	4564219	5878475
4331224	4613293	4431172
4353594	4621999	5358543
4459261	4757705	6145561
4632423	4783708	6155717
4760621	4803329	4428566
4995623	4809107	4494632
5248014	4846779	4974493
5255591	4911680	6191920
5366048	4924735	5367913
5368142	4972282	5620258
5386892	4977774	5666870
5402867	5003255	4417771
5404973	5018031	4449326
5409090	5190315	5210579
5425070	5195351	5244282
5513556	5333494	5791204
5606582	5409044	5893647
5615598	5432589	6020417
5885109	5433781	6044658
5934421	5519932	6637919
5960915	5548930	4603994
5975258	5577818	5180082
5984286	5599066	6072133
6116584	5645793	4948227
6119829	5718661	5196150
6173960	5788140	5302104

10729448_EAST

(6158559
4785517
4966257
4948833
4588037
5735174
4413817
4569299
4785685
4993857
5295573
5361529
5396981
5658115
5886310
5946845
5974738
6077117
6186588
6269585
4405119
4540142
5992583
4166523
4331224
4353594
4459261
4632423
4760621
4995623
5248014
5255591
5366048
5368142
5386892
5402867
5404973
5409090
5425070
5513556
5606582
5615598
5885109
5934421
5960915
5975258
5984286
6116584
6119829
6173960) .pn.
(6234505
6340152
6644446
4969752
4474097
4934185
5205204
5423259
5606910

10729448_EAST

5884530
6067743
6148985
4259155
4261536
4328947
4355480
4434645
4445840
4470576
4483071
4486957
4539880
4558641
4564219
4613293
4621999
4757705
4783708
4803329
4809107
4846779
4911680
4924735
4972282
4977774
5003255
5018031
5190315
5195351
5333494
5409044
5432589
5433781
5519932
5548930
5577818
5599066
5645793
5718661
5788140) .pn.
(5802759
5804220
5836193
5848568
5860515
5881599
5996862
6022158
6048037
6062588
6131325
6155730
6167802
6382400
6550865
5480231
6198202
5286950

10729448_EAST

5362943
5420392
5465601
5769579
5836442
5878475
4431172
5358543
6145561
6155717
4428566
4494632
4974493
6191920
5367913
5620258
5666870
4417771
4449326
5210579
5244282
5791204
5893647
6020417
6044658
6637919
4603994
5180082
6072133
4948227
5196150
5302104) .pn.

10729448_CLS
Most Frequently Occurring Classifications of Patents Returned
From A Search of 10729448 on April 07, 2004

Original Classifications

5	43/24
4	188/322.17
3	188/282.1
3	188/282.8
2	72/456
2	188/266.6
2	188/269
2	198/659
2	219/216
2	360/267.6
2	400/613
2	425/371

Cross-Reference Classifications

6	188/322.17
5	188/322.15
4	188/322.13
3	188/322.22
3	267/64.26
2	72/446
2	72/452.5
2	92/165PR
2	92/165R
2	100/214
2	188/266.3
2	188/266.4
2	188/266.5
2	188/317
2	198/676
2	219/216
2	219/469
2	251/167
2	267/177
2	277/565
2	384/25
2	384/26
2	400/693
2	D22/143

Combined Classifications

10	188/322.17
6	188/322.15
5	43/24
4	188/282.8
4	188/322.13
4	219/216
3	188/269
3	188/282.1
3	188/322.22
3	219/469
3	267/64.26
2	29/434
2	72/446
2	72/452.5

10729448_CLS

2 72/456
2 74/110
2 74/89.32
2 92/165PR
2 92/165R
2 100/214
2 100/257
2 188/266.3
2 188/266.4
2 188/266.5
2 188/266.6
2 188/317
2 198/659
2 198/676
2 251/167
2 267/177
2 267/64.11
2 267/64.24
2 277/565
2 296/223
2 360/267.6
2 384/25
2 384/26
2 384/45
2 384/47
2 400/613
2 400/693
2 425/371
2 D22/143

10729448_CLSTITLES
Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 10729448 on April 07, 2004

```

10 188/322.17 (4 OR, 6 XR)
    Class 188 : BRAKES
    188/266 INTERNAL-RESISTANCE MOTION RETARDER
    188/322.16 .Including seal or guide
    188/322.17 ..Between piston rod and cylinder

6 188/322.15 (1 OR, 5 XR)
    Class 188 : BRAKES
    188/266 INTERNAL-RESISTANCE MOTION RETARDER
    188/322.13 .Valve structure or location
    188/322.15 ..Piston valve detail (e.g., seat design,
        structural arrangement, metering element)

5 43/24 (5 OR, 0 XR)
    Class 043 : FISHING, TRAPPING, AND VERMIN DESTROYING
    43/4 FISHING
    43/18.1R .Rod
    43/24 ..Line guides or tips

4 188/282.8 (3 OR, 1 XR)
    Class 188 : BRAKES
    188/266 INTERNAL-RESISTANCE MOTION RETARDER
    188/281 .Resistance alters relative to direction of
        thrust member (e.g., high resistance in one direction,
low
        in the other)
    188/282.1 ..Via valved orifice in thrust member
    188/282.8 ...Spring-loaded valve

4 188/322.13 (0 OR, 4 XR)
    Class 188 : BRAKES
    188/266 INTERNAL-RESISTANCE MOTION RETARDER
    188/322.13 .Valve structure or location

4 219/216 (2 OR, 2 XR)
    Class 219 : ELECTRIC HEATING
    219/200 HEATING DEVICES
    219/201 .Combined with diverse-type art device
    219/216 ..Printing or reproduction device

3 188/269 (2 OR, 1 XR)
    Class 188 : BRAKES
    188/266 INTERNAL-RESISTANCE MOTION RETARDER
    188/269 .Using diverse fluids

3 188/282.1 (3 OR, 0 XR)
    Class 188 : BRAKES
    188/266 INTERNAL-RESISTANCE MOTION RETARDER
    188/281 .Resistance alters relative to direction of
        thrust member (e.g., high resistance in one direction, 1
ow
        in the other)
    188/282.1 ..Via valved orifice in thrust member

3 188/322.22 (0 OR, 3 XR)

```

OW

10729448_CLSTITLES

- Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER
 188/322.22 .Thrust member or piston structure
- 3 219/469 (1 OR, 2 XR)
 Class 219 : ELECTRIC HEATING
 219/260 .Resistive element: igniter type
 219/385 .Combined with container, enclosure, or support
 for material to be heated
 219/469 ..Cylindrical or roller-type support for
 material to be heated
- 3 267/64.26 (0 OR, 3 XR)
 Class 267 : SPRING DEVICES
 267/2 VEHICLE
 267/64.11 .Comprising compressible fluid
 267/64.15 ..With retarder
 267/64.26 ...Having telescoping cylinders
- 2 29/434 (1 OR, 1 XR)
 Class 029 : METAL WORKING
 29/592 METHOD OF MECHANICAL MANUFACTURE
 29/428 .Assembling or joining
 29/434 ..Retaining clearance for motion between
 assembled parts
- 2 72/446 (0 OR, 2 XR)
 Class 072 : METAL DEFORMING
 72/429 WITH MEANS TO DRIVE TOOL
 72/446 .With means to permit tool positioning
- 2 72/452.5 (0 OR, 2 XR)
 Class 072 : METAL DEFORMING
 72/429 WITH MEANS TO DRIVE TOOL
 72/452.1 .Including cam-actuated support
 72/452.2 ..Pivotal cam
 72/452.4 ...Rotary cam
 72/452.5Eccentric circle (e.g., crank)
- 2 72/456 (2 OR, 0 XR)
 Class 072 : METAL DEFORMING
 72/455 WITH TOOL CARRIER (E.G., PRESS FRAME)
 72/456 .With guide for rectilinearly moving tool
- 2 74/110 (1 OR, 1 XR)
 Class 074 : MACHINE ELEMENT OR MECHANISM
 74/840 ROTARY DRIVEN DEVICE ADJUSTABLE DURING
 OPERATION RELATIVE TO ITS SUPPORTING STRUCTURE
 74/110 .Reciprocating to reciprocating
- 2 74/89.32 (1 OR, 1 XR)
 Class 074 : MACHINE ELEMENT OR MECHANISM
 74/840 ROTARY DRIVEN DEVICE ADJUSTABLE DURING
 OPERATION RELATIVE TO ITS SUPPORTING STRUCTURE
 74/89 .Reciprocating or oscillating to or from
 alternating rotary
 74/89.23 ..Including screw and nut
 74/89.32 ...Carriage surrounding, guided by, and
 primarily supported by member other than screw (e.g.,

10729448_CLSTITLES
linear guide, etc.)

- 2 92/165PR (0 OR, 2 XR)
Class 092 : EXPANSIBLE CHAMBER DEVICES
92/165R WITH GUIDE OR SEAL ON CYLINDER END PORTION FOR
PISTON OR MEMBER MOVED BY PISTON
92/165PR .Prevent rotation
- 2 92/165R (0 OR, 2 XR)
Class 092 : EXPANSIBLE CHAMBER DEVICES
92/165R WITH GUIDE OR SEAL ON CYLINDER END PORTION FOR
PISTON OR MEMBER MOVED BY PISTON
- 2 100/214 (0 OR, 2 XR)
Class 100 : PRESSES
100/214 RECIPROCATING PRESS CONSTRUCTION
- 2 100/257 (1 OR, 1 XR)
Class 100 : PRESSES
100/214 RECIPROCATING PRESS CONSTRUCTION
100/257 .Range of movement adjustment
- 2 188/266.3 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder
188/266.2 ..Condition actuates valve or regulator
188/266.3 ...Of the rotary type
- 2 188/266.4 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder
188/266.2 ..Condition actuates valve or regulator
188/266.3 ...Of the rotary type
188/266.4Having plural openings
- 2 188/266.5 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder
188/266.2 ..Condition actuates valve or regulator
188/266.5 ...Of the pulsating or reciprocating type
- 2 188/266.6 (2 OR, 0 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder
188/266.2 ..Condition actuates valve or regulator
188/266.5 ...Of the pulsating or reciprocating type
188/266.6Side mounted
- 2 188/317 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER

10729448_CLSTITLES

188/297 .Having a thrust member with a variable volume
chamber (e.g., coaxial or telescoping tubes, compensati
ng reservoir)
188/316 ..Fluid through or around piston within chamber
188/317 ...Via fixed or variable orifice in piston

2 198/659 (2 OR, 0 XR)
Class 198 : CONVEYORS: POWER-DRIVEN
198/618 CONVEYOR SECTION
198/657 .Screw
198/659 ..Including a deformable element

2 198/676 (0 OR, 2 XR)
Class 198 : CONVEYORS: POWER-DRIVEN
198/618 CONVEYOR SECTION
198/657 .Screw
198/676 ..Helical surface formation structure

2 251/167 (0 OR, 2 XR)
Class 251 : VALVES AND VALVE ACTUATION
251/157 WITH MEANS TO INCREASE HEAD AND SEAT CONTACT
PRESSURE
251/158 .With positive reduction
251/167 ..Bifaced

2 267/177 (0 OR, 2 XR)
Class 267 : SPRING DEVICES
267/166 COIL
267/170 .Including end thrust member
267/177 ..Adjustable

2 267/64.11 (1 OR, 1 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid

2 267/64.24 (1 OR, 1 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid
267/64.15 ..With retarder
267/64.23 ...Having flexible wall
267/64.24Including rolling lobe between telescoping
members

2 277/565 (0 OR, 2 XR)
Class 277 : SEAL FOR A JOINT OR JUNCTURE
277/345 SEAL BETWEEN RELATIVELY MOVABLE PARTS (I.E.,
DYNAMIC SEAL)
277/500 .Circumferential contact seal for other than
piston
277/549 ..Peripheral radially sealing flexible
projection (e.g., lip seal, etc.)
277/562Plural peripheral radially sealing flexible
projections
277/565On radial facing side of single seal

10729448_CLSTITLES

- 2 296/223 (1 OR, 1 XR)
 Class 296 : LAND VEHICLES: BODIES AND TOPS
 296/225 TOPS
 296/210 .Roof structure
 296/216.01 ..Roof panel movable to uncover passenger area
 (e.g., sun roof or moon roof)
 296/223 ...Panel having drive or actuating means
- 2 360/267.6 (2 OR, 0 XR)
 Class 360 : DYNAMIC MAGNETIC INFORMATION STORAGE OR
 RETRIEVAL
 360/240 HEAD MOUNTING
 360/260 .For shifting head between tracks
 360/264 ..Disk record
 360/266.2 ...Linear head movement
 360/267.3Screw
 360/267.5Carriage detail
 360/267.6Guide detail
- 2 384/25 (0 OR, 2 XR)
 Class 384 : BEARINGS
 384/7 LINEAR BEARING
 384/25 .Combined plain and antifriction
- 2 384/26 (0 OR, 2 XR)
 Class 384 : BEARINGS
 384/7 LINEAR BEARING
 384/26 .Plain bearings
- 2 384/45 (1 OR, 1 XR)
 Class 384 : BEARINGS
 384/7 LINEAR BEARING
 384/43 .Recirculating
 384/45 ..No cylindrical race
- 2 384/47 (1 OR, 1 XR)
 Class 384 : BEARINGS
 384/7 LINEAR BEARING
 384/47 .Alternating roller; or antifriction bearing
 for auto seat
- 2 400/613 (2 OR, 0 XR)
 Class 400 : TYPEWRITING MACHINES
 400/578 SHEET OR WEB (E.G., RECORD-MEDIUM FEEDING
 MECHANISM)
 400/611 .For feeding web record-medium
 400/613 ..With web supply or takeup or mount therefor
 (e.g., web cartridge, etc.)
- 2 400/693 (0 OR, 2 XR)
 Class 400 : TYPEWRITING MACHINES
 400/679 MEANS AUXILIARY TO TYPEWRITING FUNCTION
 400/691 .Frame, casing, or support for typewriter
 400/693 ..Housing structure
- 2 425/371 (2 OR, 0 XR)
 Class 425 : PLASTIC ARTICLE OR EARTHENWARE SHAPING OR
 TREATING: APPARATUS
 425/363 PRESS FORMING MEANS, PRESS RESHAPING MEANS, OR

10729448_CLSTITLES

VULCANIZING MEANS IS ENDLESS SURFACE TYPE

425/371 .Cooperating endless belts

2 D22/143 (0 OR, 2 XR)

Class D22 : ARMS, PYROTECHNCIS, HUNTING AND FISHING
EQUIPMENT

D22/134 FISHING EQUIPMENT

D22/137 .Rod or reel

D22/143 ..Line guide

10729448_CLS
Most Frequently Occurring Classifications of Patents Returned
From A Search of 10729448 on April 07, 2004

Original Classifications

5 43/24
4 188/322.17
3 188/282.1
3 188/282.8
2 72/456
2 188/266.6
2 188/269
2 198/659
2 219/216
2 360/267.6
2 400/613
2 425/371

Cross-Reference Classifications

6 188/322.17
5 188/322.15
4 188/322.13
3 188/322.22
3 267/64.26
2 72/446
2 72/452.5
2 92/165PR
2 92/165R
2 100/214
2 188/266.3
2 188/266.4
2 188/266.5
2 188/317
2 198/676
2 219/216
2 219/469
2 251/167
2 267/177
2 277/565
2 384/25
2 384/26
2 400/693
2 D22/143

Combined Classifications

10 188/322.17
6 188/322.15
5 43/24
4 188/282.8
4 188/322.13
4 219/216
3 188/269
3 188/282.1
3 188/322.22
3 219/469
3 267/64.26
2 29/434
2 72/446
2 72/452.5

10729448_CLS

2 72/456
2 74/110
2 74/89.32
2 92/165PR
2 92/165R
2 100/214
2 100/257
2 188/266.3
2 188/266.4
2 188/266.5
2 188/266.6
2 188/317
2 198/659
2 198/676
2 251/167
2 267/177
2 267/64.11
2 267/64.24
2 277/565
2 296/223
2 360/267.6
2 384/25
2 384/26
2 384/45
2 384/47
2 400/613
2 400/693
2 425/371
2 D22/143